

# REVIEWS OF BOOKS

## CHARLES DARWIN

**Himmelfarb, Gertrude.** *Darwin and the Darwinian Revolution.* London, 1959. Chatto and Windus. Pp. ix+422. Price 42s.

DR. HIMMELFARB'S ACCOUNT of the Darwinian revolution, based on both published and unpublished material, is scholarly, admirably documented, well written, balanced and urbane. She puts Darwin's childhood into perspective, dismissing with justified irony the sort of hindsight which detects in the boyish collecting of beetles an intimation of adult genius. We are left, after her kindly if unsparing undermining of myth, with a picture of a youngster of no obvious scientific ability, over-dominated by his father and orthodox in behaviour and belief, with little to distinguish him except great patience and generous modesty—with, indeed, Darwin as he described himself before the idolators got to work on him. And we are still left with the puzzling question, how such a man, apparently less talented than so many of his contemporaries, managed to effect the greatest scientific revolution since Newton.

It was not by outstanding ability as observer or experimenter, not by exceptional rigour of assessment, not by remarkably vivid imagination. All the usual explanations of scientific success fail to explain Darwin, and this should be a salutary thought to the biological faculties of our universities in their insistence on entrance requirements and examination performances apparently geared to some stereotype of the biologist as merely an applied physical scientist. Dr. Himmelfarb probably provides the answer to the Darwin enigma when she refers to his extraordinary fertility and delight in theorising, on any and every fact which came under his observation, and the remarkable patience with which he submitted all his theories to the scrutiny of facts.

Carefully collating Darwin's manuscript notes, Dr. Himmelfarb convincingly demolishes Darwin's own account of his theory's emergence. Contrary to his statement in *The Origin*, he was already emotionally committed to the

theory of evolution years before 1842; while his claim, to have "worked on true Baconian principles, and without any theory collected facts on a wholesale scale", crumbles before the evidence that what he did was to speculate boldly and then search for facts to support his speculations. And, since such a man evidently felt it necessary to persuade the public (first, no doubt, having persuaded himself) that his mode of working was more consonant with the usual view of scientific method, perhaps we should ask ourselves the more urgently whether that view may not be both incorrect and stultifying.

When she comes to examine the theory itself, Dr. Himmelfarb displays the same ability to marshal evidence as in the more personal and historical sections, but at times her biological knowledge seems inadequate to the task. Confidence is bound to be shaken in one who can state, for example, that in Mendel's experiments "new species appeared suddenly in the form of mutations". Nevertheless, the weaknesses and tautology of *The Origin* are skilfully exposed, along with the naivety of its philosophical presuppositions—even if, at times, one is reminded of a skilful lawyer probing for lines of attack rather than of a scientist carrying out an objective reassessment of a theory.

At the end of it all, Darwin emerges a great man still. Without detracting from the value of Dr. Himmelfarb's conscientious and in places fascinating study, it may be mentioned that its result had been foreseen long ago in a manuscript jotting by Darwin's bulldog:

### The Four Stages of Public Opinion I (Just after publication)

The Novelty is absurd and subversive of Religion & Morality. The propounder both fool & knave.

### II (Twenty years later)

The Novelty is absolute Truth and will yield a full & satisfactory explanation of things in general. The propounder a man of sublime genius & perfect virtue.

### III (Forty years later)

The Novelty won't explain things in general after all and therefore is a wretched failure. The propounder a very ordinary person advertised by a clique.

IV (A century later)

The Novelty a mixture of truth & error. Explains as much as could reasonably be expected. The propounder worthy of all honour in spite of his share of human frailties, as one who has added to the permanent possessions of science.

CYRIL BIBBY

**Darwin, Charles.** *The Origin of Species: A Variorum Text* edited by Morse Peckham. Philadelphia, 1959. University of Pennsylvania Press. (London, Oxford University Press.) Pp. 816. Price 120s.

THIS IS AN astonishing reference work by a dedicated scholar who provides a fascinating introduction: "Of the 3,878 sentences in the first edition, [of the *Origin of Species*] nearly 3,000, about 75 per cent, were re-written from one to five times each. Over 1,500 sentences were added, and of the original sentences plus these, nearly 325 were dropped. Of the original and added sentences there are nearly 7,500 variants of all kinds. In terms of net added sentences, the sixth edition is nearly a third as long again as the first." All these variations Dr. Peckham sets out. No future student can properly discuss the evolution of Darwin's ponderings without turning to this monumental source of detail.

G. C. L. B.

*The Living Thoughts of Darwin.* Presented in a new and revised edition and with a Preface by Sir Julian Huxley assisted by James Fisher. London, 1958. Cassell. Pp. viii + 156. Price 15s.

AT THIS TIME of Darwin centenary celebration, it is appropriate that there should emerge this revised and enlarged edition of No. 2 of "The Living Thought Library" first issued in 1939. Sir Julian Huxley has added a new Preface.

The book consists of a skilful blending of substantial paragraphs from the original Darwin publications with an informed commentary. By this means we are provided with a lively appreciation of some of the innumerable topics with which Darwin concerned himself. This is a book which can be read with both pleasure and profit even on those many occasions, like train journeys, when long concentration is scarcely

feasible, yet short period absorption is altogether welcome.

G. C. L. B.

T. H. HUXLEY

**Bibby, Cyril.** *T. H. Huxley: Scientist, Humanist and Educator.* London, 1959. Watts. Pp. xxii + 330. Appendices, Notes, Index and 13 pages of photographs. Price 25s.

THIS BOOK is fascinating in many ways. It is pleasantly, indeed admirably, written. The author's own style has quite evidently been influenced by the directness and force of the words and writings of his subject. Thomas Henry Huxley appears as a giant of even larger dimensions than most will already have realized. His great contribution to the flowering of evolutionary thought, his role as Darwin's champion, is displayed as but one facet of his versatility. The photographs show the evolution and maturing of a man of great eminence and personal integrity, and kindness too. Huxley's influence on the universities and national education is excellently explained. His versatility was immense. The author, in general, allows his subject to portray himself, by what he did and what he said. There is a satisfactory compromise, in succeeding chapters, between concentration on particular topics in turn and the successive stages of Huxley's personal history, the flow of his life in which his special interests extended over decades. This is a highly satisfying example of the best in the actual technique of biography, and the author is to be congratulated on his skill.

The two Forewords, by Huxley's distinguished grandsons, Julian and Aldous, are but one further demonstration of the familial aspects of vigour, versatility and, may one say, dedication too.

G. C. L. B.

BIOLOGY

**Bertram, Colin.** *Adam's Brood.* With a foreword by Sir Julian Huxley. London, 1959. Peter Davies. Pp. 223. Price 21s.

IN A PERSONAL and readable style Dr. Bertram has given us a survey of man's condition on earth. Here we are, the Human Family, more or